

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
6 May 2005 (06.05.2005)

PCT

(10) International Publication Number
WO 2005/041571 A1

- (51) International Patent Classification⁷: **H04N 7/015**
- (21) International Application Number:
PCT/KR2004/002767
- (22) International Filing Date: 29 October 2004 (29.10.2004)
- (25) Filing Language: Korean
- (26) Publication Language: English
- (30) Priority Data:
10-2003-0076098 29 October 2003 (29.10.2003) KR
- (71) Applicant (for all designated States except US): ELEC-
TRONICS AND TELECOMMUNICATIONS RE-
SEARCH INSTITUTE [KR/KR]; 161, Gajeong-dong,
Yuseong-gu, Daejeon 305-350 (KR).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): PARK, Sung-Ik
[KR/KR]; 146-14, Sinseong-dong, Yuseong-gu, Daejeon
305-804 (KR). LEE, Yong-Tae [KR/KR]; #203-1307
Mokryun Apt., Dunsan 1-dong, Seo-gu, Daejeon 302-771
(KR). SEO, Jae-Hyun [KR/KR]; #102-1102 Hanul Apt.,
Sinseong-dong, Yuseong-gu, Daejeon 305-707 (KR).
KIM, Seung-Won [KR/KR]; #109-1804 Narae Apt.,
Jeonmin-dong, Yuseong-gu, Daejeon 305-729 (KR). LEE,
Soo-In [KR/KR]; #106-606 Clover Apt., Dunsan-dong,
Seo-gu, Daejeon 302-772 (KR).
- (81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG,
MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH,
PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report
— with amended claims
- Date of publication of the amended claims:
29 September 2005
- For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: APPARATUS AND METHOD OF ON-CHANNEL REPEATER

(57) Abstract: Provided is an on-channel repeater and method thereof. The on-channel repeating apparatus includes: a receiving unit for receiving a Radio Frequency (RF) broadcast signal; a demodulating unit for converting the RF signal into a baseband signal; an equalizing unit for equalizing the baseband signal to generate an equalized baseband signal; a modulating unit for converting the equalized baseband signal into an RF signal; and a transmitting unit for transmitting the RF signal.

WO 2005/041571 A1